

Regional HIV/AIDS Epidemiologic Profile of Cambridge, Massachusetts: 2014

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2014, this resulted in the removal of 4,135 HIV/AIDS cases, of which 973 have died and 3,162 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location at diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that previous HIV/AIDS fact sheets, data reports and presentations included cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual reported risk category for men; those cases have been reassigned to the no identified risk (NIR) category. The presumed heterosexual reported risk category was used with the intention of identifying HIV reported risk for women when sex with men is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of women living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual reported risk category. The application of the presumed heterosexual reported risk category to men is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate reported risks that are possible for men, including sex with other men (MSM) or IDU. The CDC reports men diagnosed with HIV/AIDS who report sex with women as their only risk factor, without corresponding partner risk or HIV status information, in the NIR category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for men in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual reported risk categories for women.

Table 1. Total number of people reported with HIV infection or AIDS¹ by mortality status on December 31, 2013: Cambridge, Massachusetts²

	N	%
People Living with HIV/AIDS	422	57%
People Reported with HIV or AIDS who are Deceased	324	43%
Total Number of People Reported with HIV Infection or AIDS	746	100%

¹ Does not include individuals diagnosed with HIV infection (non-AIDS) who died prior to January 1, 1999 or who were not in care on January 1, 1999

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 2. Average annual rate of HIV infection diagnosis from 2010 to 2012 and HIV/AIDS prevalence rate on 12/31/13¹: Cambridge, Massachusetts²

Average annual HIV diagnosis rate from 2010–2012	Average rate per 100,000	Average annual number of HIV diagnoses
Cambridge, MA	13.6	14.3
Massachusetts Total	10.5	688.3

HIV/AIDS prevalence rate on 12/31/13	Rate per 100,000	Number of people living with HIV/AIDS
Cambridge, MA	401.3	422
Massachusetts Total	292.7	19,165

¹ The denominators for rate calculations are from the MDPH Massachusetts Race Allocated Census 2010 Estimates (MRACE 2010), Massachusetts Department of Public Health, Bureau of Health Information, Statistics, Research, and Evaluation.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 3. People living with HIV/AIDS¹, deaths among people reported with HIV/AIDS, and newly diagnosed HIV infections by year²: 2003–2012, Cambridge, Massachusetts³

Year	HIV/AIDS Prevalence	Deaths among those with HIV/AIDS	Diagnosis of HIV Infection
2003	298	9	22
2004	312	7	21
2005	324	5	17
2006	338	7	21
2007	352	-- ⁴	16
2008	368	-- ⁴	17
2009	386	-- ⁴	21
2010	398	5	17
2011	405	5	12
2012	412	7	14

¹ Number of people living with HIV/AIDS on 12/31 of each year

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size for the assurance of confidentiality. Additional values may be suppressed to prevent back calculation.

Data source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 4. People diagnosed with HIV infection from 2010–2012¹ and people living with HIV/AIDS on December 31, 2013 by gender, place of birth, race/ethnicity, exposure mode, age at HIV infection diagnosis and current age: Cambridge, Massachusetts²

HIV Infection Diagnoses			PLWH/A	
Gender:	N	%	N	%
Male	36	84%	320	76%
Female	7	16%	102	24%
Place of Birth:	N	%	N	%
US	21	49%	246	58%
Puerto Rico/US Dependency ³	0	0%	14	3%
Non-US	22	51%	162	38%
Race/Ethnicity:	N	%	N	%
White (non-Hispanic)	19	44%	183	43%
Black (non-Hispanic)	15	35%	177	42%
Hispanic/Latino	-- ⁷	-- ⁷	49	12%
Asian/Pacific Islander	-- ⁷	-- ⁷	11	3%
Exposure Mode:	N	%	N	%
Male-to-male sex (MSM)	26	60%	196	46%
Injection Drug Use (IDU)	0	0%	39	9%
MSM/IDU	-- ⁷	-- ⁷	17	4%
Heterosexual Sex	0	0%	42	10%
Other	-- ⁷	-- ⁷	14	3%
Total Undetermined	16	37%	114	27%
• Presumed Heterosexual Sex ⁴	5	12%	39	9%
• Undetermined ⁵	11	26%	75	18%
Age:	N	%	N	%
	At Diagnosis		On December 31, 2013	
Under 13	0	0%	-- ⁷	-- ⁷
13 to 19	-- ⁷	-- ⁷	-- ⁷	-- ⁷
20 to 24	-- ⁷	-- ⁷	6	1%
25 to 29	6	14%	15	4%
30 to 34	6	14%	28	7%
35 to 39	10	23%	24	6%
40 to 44	-- ⁷	-- ⁷	41	10%
45 to 49	6	14%	57	14%
50 to 54	-- ⁷	-- ⁷	79	19%
55 to 59	-- ⁷	-- ⁷	71	17%
60+	-- ⁷	-- ⁷	98	23%
Total⁶	43	100%	422	100%

¹ Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

² Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁴ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁵ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁶ Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁷ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 5. People living with HIV/AIDS on December 31, 2013 by gender and race/ethnicity: Cambridge, Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White (non-Hispanic)	164	51%	19	19%
Black (non-Hispanic)	101	32%	76	75%
Hispanic/Latino	43	13%	-- ³	-- ³
Asian/Pacific Islander	10	3%	-- ³	-- ³
Total²	320	100%	102	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Total includes American Indian/Alaska Native, other and unspecified race/ethnicity.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 6. People living with HIV/AIDS on December 31, 2013 by gender and exposure mode: Cambridge, Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	196	61%	N/A	N/A
Injection drug use (IDU)	22	7%	17	17%
MSM/IDU	17	5%	N/A	N/A
Heterosexual sex	16	5%	26	25%
Other	8	3%	6	6%
Total Undetermined	61	19%	53	52%
• Presumed heterosexual sex ²	N/A	N/A	39	38%
• Undetermined ³	61	19%	14	14%
Total	320	100%	102	100%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 7. People diagnosed with HIV infection by gender and year of diagnosis: Cambridge, Massachusetts¹, 2003–2012²

	Male		Female		Total
	N	%	N	%	
2003	19	86%	3	14%	22
2004	18	86%	3	14%	21
2005	12	71%	5	29%	17
2006	15	71%	6	29%	21
2007	10	63%	6	38%	16
2008	14	82%	3	18%	17
2009	19	90%	2	10%	21
2010	14	82%	3	18%	17
2011	10	83%	2	17%	12
2012	12	86%	2	14%	14

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 8. People diagnosed with HIV infection by race/ethnicity and year of diagnosis: Cambridge, Massachusetts¹, 2003–2012²

	White Non-Hispanic		Black Non-Hispanic		Hispanic/Latino		Total ³
	N	%	N	%	N	%	N
2003	-- ⁴	-- ⁴	12	55%	-- ⁴	-- ⁴	22
2004	11	52%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	21
2005	7	41%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	17
2006	9	43%	6	29%	6	29%	21
2007	5	31%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	16
2008	6	35%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	17
2009	9	43%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	21
2010	7	41%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	17
2011	5	42%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	12
2012	7	50%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	14

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Totals include Asian/Pacific Islander, American Indian/Alaskan Native individuals, and those of other or undetermined race/ethnicity.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 9. People diagnosed with HIV infection by place of birth and year of diagnosis: Cambridge, Massachusetts¹, 2003–2012²

	US		Puerto Rico/ US Dependency ³		Non-US		Total
	N	%	N	%	N	%	N
2003	11	50%	0	0%	11	50%	22
2004	15	71%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	21
2005	9	53%	0	0%	8	47%	17
2006	13	62%	0	0%	8	38%	21
2007	10	63%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	16
2008	9	53%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	17
2009	11	52%	-- ⁴	-- ⁴	-- ⁴	-- ⁴	21
2010	11	65%	0	0%	6	35%	17
2011	5	42%	0	0%	7	58%	12
2012	5	36%	0	0%	9	64%	14

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Ninety-eight percent of all people diagnosed with HIV infection in MA who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, <1% were born in American Samoa, <1% were born in Guam and 1% were born in an unknown dependency.

⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 10. People diagnosed with HIV infection by exposure mode and year of diagnosis: Cambridge, Massachusetts¹, 2003–2012²

	MSM		IDU		MSM/ IDU		HTSX		Other		Pres. HTSX ³		Undeter- mined ⁴		Total
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2003	8	36%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	8	36%	22
2004	11	52%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	21
2005	10	59%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	17
2006	12	57%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	21
2007	7	44%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	16
2008	10	59%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	-- ⁵	17
2009	10	48%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	0	0%	0	0%	-- ⁵	-- ⁵	5	24%	21
2010	10	59%	0	0%	-- ⁵	-- ⁵	0	0%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	17
2011	8	67%	0	0%	0	0%	0	0%	-- ⁵	-- ⁵	0	0%	-- ⁵	-- ⁵	12
2012	8	57%	0	0%	0	0%	0	0%	0	0%	-- ⁵	-- ⁵	-- ⁵	-- ⁵	14

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14

Table 11. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by year of diagnosis: Cambridge, Massachusetts¹, 2003–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Year:	N	N	%
2003	9	22	41%
2004	7	21	33%
2005	5	17	29%
2006	7	21	33%
2007	5	16	31%
2008	-- ³	-- ³	-- ³
2009	9	21	43%
2010	-- ³	-- ³	-- ³
2011	-- ³	-- ³	-- ³
2012	-- ³	-- ³	-- ³

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available ten-year period after the implementation of HIV infection reporting in 1999.

³ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program, Data as of 1/1/14

Table 12. People diagnosed with HIV infection and AIDS within two months and all people diagnosed with HIV infection by gender, race/ethnicity, and place of birth: Cambridge, Massachusetts,¹ 2010–2012²

	HIV and AIDS diagnosed within two months	All HIV infection diagnoses	% diagnosed with HIV and AIDS within two months
Gender:	N	N	%
Male	-- ⁵	-- ⁵	-- ⁵
Female	-- ⁵	-- ⁵	-- ⁵
Race/Ethnicity:	N	N	%
White (non-Hispanic)	5	19	26%
Black (non-Hispanic)	5	15	33%
Hispanic/Latino	-- ⁵	-- ⁵	-- ⁵
Asian/Pacific Islander	-- ⁵	-- ⁵	-- ⁵
Place of Birth:	N	N	%
US	-- ⁵	-- ⁵	-- ⁵
Puerto Rico/US Dependencies ⁴	-- ⁵	-- ⁵	-- ⁵
Non-US	7	22	32%
Total	11	43	26%

¹ Effective January 1, 2011, the Massachusetts Department of Public Health HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Reflects year of HIV infection diagnosis among all individuals reported with HIV infection, with or without an AIDS diagnosis for the most recently available three-year period after the implementation of HIV infection reporting in 1999.

³ Includes American Indian/Alaska Native, other and unspecified race/ethnicity.

⁴ Ninety-eight percent of people diagnosed with HIV infection from 2010–2012 who were born in a US dependency were born in Puerto Rico, 1% were born in the US Virgin Islands, 1% were born in Guam and 1% were born in an unknown dependency.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), Data as of 1/1/14